



Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

AUG 19 2004



ENTERED



Mr. Steve Zappe, Project Leader
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, New Mexico 87505-6303

Subject: Transmittal of CBFO Surveillance Report S-04-11 Bechtel Nevada, Nevada Test Site (NTS), TRU Waste Characterization Activities Utilizing the Subcontracted Services of the Washington TRU Solutions (WTS), Central Characterization Project (CCP)

Dear Mr. Zappe:

This letter transmits a copy of the Nevada Test Site (NTS)/Central Characterization Project (CCP) Surveillance Report for the re-deployment of characterization equipment at the NTS as you requested. The surveillance was conducted August 3 and 4, 2004.

Please contact me at (505) 234-7423 should you have any questions concerning this surveillance report.

Sincerely,

Ava L. Holland
Quality Assurance Manager

Enclosure

cc: w/enclosure
R. Detwiler, CBFO *ED
L. Piper, CBFO *ED
D. Miehl, CBFO *ED
S. Holmes, NMED *ED
CBFO QA File
CBFO M&RC
WIPP Operating Record, MS 486-06



U.S. DEPARTMENT OF ENERGY
CARLSBAD FIELD OFFICE

SURVEILLANCE REPORT

OF THE

CENTRAL CHARACTERIZATION PROJECT (CCP) DEPLOYED AT THE
NEVADA TEST SITE (NTS)

LAS VEGAS, NEVADA

SURVEILLANCE NUMBER S-04-11

August 3 – 4, 2004

TRU WASTE
CHARACTERIZATION AND CERTIFICATION PROGRAMS



Prepared by:

Charles L. Riggs
Charles L. Riggs, CTAC
Surveillance Team Leader

Date:

08/10/04

Approved by:

D. S. Miehl
Dennis S. Miehl, CBFO
Quality Assurance Specialist

Date:

8-11-04

1.0 EXECUTIVE SUMMARY

Carlsbad Field Office (CBFO) Surveillance S-04-11 was conducted to evaluate the implementation of technical and quality assurance (QA) activities related to the redeployment of characterization equipment at the Nevada Test Site (NTS) by the Washington TRU Solutions (WTS) Central Characterization Project (CCP) in support of Bechtel Nevada (BN) characterization activities. The NTS/CCP activities evaluated included selected QA program activities, equipment/processes, procedures, and personnel.

The last recertification audit (CBFO A-04-04) of the NTS/CCP was conducted at the CBFO facilities in Carlsbad, New Mexico, in October 2003. The audit report stated in part that, "It should be noted that prior to any future and acceptable characterization by the NTS/CCP, a CBFO surveillance would be scheduled and performed to verify that the equipment, processes, and procedures remain as currently certified and approved for S5000 debris waste." The surveillance was conducted to satisfy this commitment.

During CBFO Recertification Audit A-05-02, presently scheduled for October 4 – 8, 2004, at the NTS/CCP facilities, the NTS/CCP technical and QA procedures will be evaluated relative to the flow-down of requirements from the CBFO Quality Assurance Program Document (QAPD), the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP), the Safety Analysis Report for the TRUPACT-II Shipping Package (TRUPACT-II Authorized Methods for Payload Control (TRAMPAC)), and the contact-handled transuranic Waste Acceptance Criteria (CH-WAC) for the WIPP. This audit will also evaluate the implementation and effectiveness of NTS/CCP activities.

The surveillance was conducted at the NTS/CCP facilities on August 3 and 4, 2004. The surveillance team determined that the NTS/CCP areas evaluated were satisfactorily implemented. No conditions adverse to quality were identified as a result of the surveillance. Two Recommendations were provided to CBFO management for consideration (see section 6.0).

2.0 SCOPE

The surveillance team evaluated the redeployment of characterization equipment at the NTS to verify that the equipment, processes, and procedures remain as currently certified and approved for retrievably stored debris waste (S5000).

The following QA activities were evaluated in accordance with the CBFO QAPD:

- QA Program Interfaces
- Nonconformances and Corrective Action
- Personnel Qualification and Training
- Documents and Records
- Audits/Assessments

The following NTS/CCP technical activities were evaluated for implementation with the WAC/WAP:

Acceptable Knowledge (AK)
Headspace Gas (HSG)
Visual Examination (VE)
Real-Time Radiography (RTR)
Nondestructive Examination (NDE)

A checklist was developed from the current revisions of the following documents:

- *CCP Transuranic Waste Quality Assurance Characterization Project Plan (QAPjP)*, CCP-PO-001
- *CCP Transuranic Waste Certification Plan*, CCP-PO-002
- *CCP/NTS Interface Document*, CCP-PO-009
- Contract between Bechtel Nevada and WTS (Statement of Work)
- Initial Certification of Central Characterization Project at Nevada Test Site
- Related NTS/CCP technical and QA implementing procedures.

3.0 SURVEILLANCE TEAM AND OBSERVERS

SURVEILLANCE TEAM

Charlie Riggs Surveillance Team Leader/CBFO Technical Assistance
Contractor (CTAC)

OBSERVER

Dorothy Gill New Mexico Environment Department (NMED)/Contractor

4.0 SURVEILLANCE PARTICIPANTS

NTS/CCP individuals involved in the surveillance are identified in Attachment 1. A pre-surveillance meeting was held at the NTS/CCP facility on August 3, 2004. The surveillance was concluded with a post-surveillance meeting at the NTS/CCP facility on August 4, 2004.

5.0 SUMMARY OF SURVEILLANCE RESULTS

5.1 Program Implementation

The surveillance team concluded that the NTS/CCP technical and QA procedures, personnel, and equipment/processes are satisfactorily implemented.

5.2 Activities Evaluated

The surveillance team verified continued implementation of the NTS/CCP QA program documents and evaluated quality program activities associated with personnel training and qualification, control of nonconformances and corrective actions, control of documents and records, and program assessments. The implementation of technical equipment/processes, procedures, and personnel were also evaluated.

5.2.1 Equipment/Processes

The surveillance team evaluated equipment/processes in the areas of VE, RTR, HSG, and NDA, and verified that the same equipment is being used that was previously deployed at NTS/CCP.

VE

The VE activities are performed by BN personnel in a hard-walled building using joint BN/CCP procedures. VE activities have been an ongoing process on different types of waste not associated with the WIPP project.

RTR

The RTR is performed using Real-time Radiography Mobile Characterization System's RTR-5 [built by VJ Technologies]. The unit has not been used since it was last at NTS/CCP. The unit was taken back to VJ Technologies facilities and upgraded by removing the wheels (it is now transported on a flat-bed truck) and enlarging the operator's area.

NDA

The NDA is performed using a Mobile Characterization Systems (MCS) segmented gamma scanner. The unit had been deployed to Hanford. The unit was as described in the certification letter except there was no drum conveyor system. Only a jib crane was used for handling drums. This modification has no impact on the NDA data.

HSG

HSG sampling and analysis is performed using a NUCFIL headspace gas system for volatile organic compounds and hydrogen and methane analysis. The unit had been deployed to Hanford. The surveillance team noted that one of two gas chromatography/mass spectrometry (GC/MS) units had been replaced. The new GC/MS has been used in the Performance Demonstration Program (PDP) at Hanford since installation.

The surveillance team recommends that key components, such as the GC/MS units in a NUCFIL HSG system, have unique identifiers on the certification letter (see Recommendation 1).

The surveillance team determined that the equipment/processes were satisfactorily implemented. The equipment/processes are in compliance with the certification letter for NTS/CCP.

5.2.2 Procedures

The surveillance team determined that current revisions of all of the procedures on the CBFO Certification Letter for NTS/CCP are in effect except for three procedures that have been cancelled (CCP-QP-013, *CCP QAPD Matrix*; CCP-QP-020, *CCP Independent Assessments*; and CCP-QP-004, *CCP Certification of CCP Audit Personnel*). The CBFO no longer requires a QAPD matrix. Independent assessments are now performed on CCP by WTS.

The surveillance team noted that the list of certified procedures for NTS/CCP does not include the procedures for transportation (see Recommendation 2). The current revisions of the NTS/CCP procedures from the CBFO certification letter are listed in Attachment 2.

The surveillance team concluded that the procedures were satisfactorily implemented.

5.2.3 Personnel

The surveillance team interviewed personnel and reviewed selected training records.

The surveillance team concluded that the appropriate, adequately trained, personnel were in place.

5.3 CORRECTIVE ACTION REPORTS (CARs), OBSERVATIONS, RECOMMENDATIONS

No conditions adverse to quality or observations were identified during the surveillance. No CARs were issued as a result of this surveillance.

Two Recommendations were presented for CBFO management consideration:

Recommendation 1

It is recommended that the certification letter for CCP at each site contain specific identifying information such as serial numbers on the GC/MS analytical systems on a NUCFIL HSG unit.

Recommendation 2

It is recommended that the certification letter for CCP at each site either contain the applicable transportation procedures or reference the audit report that contains the national certification for transportation.

6.0 LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Surveillance

Attachment 2: NTS/CCP Documents Evaluated

| PERSONNEL CONTACTED DURING THE SURVEILLANCE | | | | |
|---|-----------------------------|----------------------|------------------------------|---------------------------|
| NAME | TITLE/ORG | PRE-SURV. MEETING | CONTACTED DURING SURV. | POST- SURV. MEETING |
| Colarusso, Angela | NSO/WMD, NSO TRU Project | X | X | X |
| Davidson, Craig | TS/MSC | | X | |
| Gregory, Louis | VEE/BN | | X | |
| Griswold, Lincoln | VPM/CCP | X | | |
| Groover, Terri-Anne | Chemist-HSG/NFT | | X | |
| Haar, David | Manager/CCP | X | X | X |
| Harris, Alton | DOE/HQ | X | X | X |
| Hasselstrom, Thad | NDE/MSC | | X | |
| McDowell, Andrew | Chemist-HSG/NFT | | X | |
| Morris, Wade C. | NDA-SME, MSC | | X | |
| Mussmen, William | NDE/MSC | | X | |
| Norton, Joni | NSO/WMD, NSO TRU Project | X | X | X |
| Pennala, Eric | GM/MSC | | X | X |
| Siddoway, Ingrid | TRU Ops Support | X | X | X |
| Westik, George | EA, MCS/Canberra | X | X | |

NTS/CCP DOCUMENTS EVALUATED

| Number | Document/Rev. No. | DOCUMENT TITLE |
|--------|---|--|
| 1 | CCP-PO-001, R8 | CCP Transuranic Waste Quality Assurance Project Plan |
| 2 | CCP-PO-002, R9 | CCP Transuranic Waste Certification Plan |
| 3 | CCP-PO-003, R6 | CCP TRUPACT-II Authorized Methods for Payload Control |
| 4 | CCP-PO-008, R5 | CCP Quality Assurance Administrative Program |
| 5 | CCP-PO-009, R7 | CCP/NTS Interface Document |
| 6 | BN/WTS Contract/Statement of Work, R5 | Bechtel Nevada, NTS Statement of Work for Characterization of NTS TRU Waste |
| 7 | CCP-QP-001, R2 | CCP Graded Approach |
| 8 | CCP-QP-002, R15 | CCP Training and Qualification Plan |
| 9 | CCP-QP-004, R5 | CCP Corrective Action Management |
| 10 | CCP-QP-005, R9 | CCP TRU Nonconforming Item Reporting and Control |
| 11 | CCP-QP-006, R5 | CCP Corrective Action Reporting and Control |
| 12 | CCP-QP-008, R9 | CCP Records Management |
| 13 | CCP-QP-009, R3 | CCP Work Control Process |
| 14 | CCP-QP-010, R11 | CCP Document Preparation, Approval and Control |
| 15 | CCP-QP-011, R4 | CCP Notebooks & Logbooks |
| 16 | CCP-QP-015, R6 | CCP Procurement |
| 17 | CCP-QP-016, R8 | CCP Control of Measuring, Testing, and Data Collection Equipment |
| 18 | CCP-QP-017, R2 | CCP Identification and Control of Items |
| 19 | CCP-QP-018, R3 | CCP Management Assessments |
| 20 | CCP-QP-019, R2 | CCP Quality Assurance Reporting to Management |
| 21 | CCP-QP-021, R4 | CCP Surveillance Program |
| 22 | CCP-QP-022, R3 | CCP TRU Software Quality Assurance |
| 23 | CCP-QP-023, R1 | CCP Handling, Storage, and Shipping |
| 24 | CCP-QP-026, R6 | CCP Inspection Control |
| 25 | CCP-QP-027, R2 | CCP Test Control |
| 26 | CCP-QP-028, R5 | CCP Records Filing, Inventorying, Scheduling, and Dispositioning |
| 27 | CCP-TP-001, R10 | CCP Project Level Data Validation and Verification |
| 28 | CCP-TP-002, R13 | CCP Reconciliation of DQOs and Reporting Characterization Data |
| 29 | CCP-TP-003, R14 | CCP Sampling Design and Data Analysis for RCRA Characterization |
| 30 | CCP-TP-005, R13 | CCP Acceptable Knowledge Documentation |
| 31 | CCP-TP-007, R19 | CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure |
| 32 | CCP-TP-009, R13 | CCP Single Sample Manifold Data Handling Procedure |
| 33 | CCP-TP-028, R2 | CCP Radiographic Test and Training Drum Requirements |
| 34 | CCP-TP-029, R13 | CCP Single-Sample Manifold Headspace Gas Sampling and Analysis Methods and Equipment Calibration |
| 35 | CCP-TP-030, R11 | CCP TRU Waste Certification & WWIS Data Entry |
| 36 | CCP-TP-032, R11 | CCP Single Sample Manifold Data Validation Procedure |
| 37 | CCP-TP-045, R7 | CCP RTR #5 Radiography Inspection Operating Procedure |

NTS/CCP DOCUMENTS EVALUATED

| Number | Document/Rev. No. | DOCUMENT TITLE |
|---------------|--------------------------|--|
| 38 | CCP-TP-050, R3 | CCP Mobile Segmented Gamma Scanner Calibration Procedure |
| 39 | CCP-TP-051, R7 | CCP Mobile Segmented Gamma Scanner Operation |
| 40 | CCP-TP-052, R7 | CCP Mobile Segmented Gamma Scanner Data Reviewing, Validating, and Reporting |
| 41 | CCP-TP-056, R3 | CCP HSG Performance Demonstration Plan |
| 42 | CCP-TP-058, R1 | CCP NDA Performance Demonstration Plan |
| 43 | CCP-TP-061, R4 | CCP TRU Waste Container Inspection and Control at NTS |
| 44 | CCP-TP-062, R10 | CCP TRU Waste Visual Examination, Segregation, and Repacking |